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ABSTRACT

The U.S. Department of Energy sponsored an energy education communications network from August, 1980 through November 1981 for educators and information specialists who deal with K-12 students, vocational training, adult and postsecondary education, and the general public in Illinois, Indiana, Minnesota, Ohio and Wisconsin. As a final report, this document summarizes the basic workings of the Midwest Energy Education Consortium model and includes recommendations, evaluation, and future direction. The emphasis of the program was on sharing information about energy education materials, workshops, programs, resources, and funding opportunities. Channels used were periodic and special mailings, telephone calls, and quarterly meetings. Members concluded that the Consortium was a cost-effective, valuable service, should be continued and expanded to include other states, and should have more private sector involvement and information exchange. (Author/DC)

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Midwest energy education consortium

Brief Overview:

Midwest Energy Education Consortium

Purpose: a) To stimulate development of energy education programs, materials, and delivery strategies for K-12, post-secondary, and adult levels; b) To create a way to encourage sharing and interaction among the membership.

Dates: July, 1980 - November, 1981

Costs: $50,000 grant from U.S. Department of Energy, $9,000 from participating states (Illinois, Indiana, Minnesota, Ohio, and Wisconsin)

Administering Agency: Minnesota Environmental Sciences Foundation, Inc. (a private, tax-exempt environmental education organization), Room 312 Security Building, 2395 University Avenue, St. Paul, MN 55114, Edward Hessler, Executive Director.

Staff: Molly Redmond, Coordinator, full time; Judy Thornton, Administrative Assistance/Clerical, part-time.

Accomplishments:

a) Put together a network of educators and information specialists responsible for energy education for K-12, adult/post-secondary, and general public (consumers);
b) Shared substantial amounts of information by phone, mail and quarterly meetings;
c) Broadened the information-sharing network beyond the original group of educators, and built a base for an expansion into other states, and for inclusion of private sector energy educators as integral members of the next stage of the Consortium;
d) Organized and implemented a 10-state meeting of 75 energy educators, both private and public sector, for the National Science Teachers Association, November 13-14, 1981, Minneapolis.

Publications:

1) Two bibliographies of K-12 energy education materials
2) Bibliography of adult/post-secondary education materials
3) Inventory of energy education programs
4) Inventory of community energy projects
5) Bulletins to members: October, 1980, and January, February, March, April, May, June, July, August, September, November of 1981
6) Four quarterly reports and one final report

General Evaluation: Members characterized the Consortium as a valuable, cost-effective service, which increased their access to information about energy education programs and materials, and thereby helped them cut development and dissemination costs for materials and programs in their own states. They, with the Coordinator, are independently seeking funding for continuing and expanding the network.

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FINAL REPORT:

MIDWEST ENERGY EDUCATION CONSORTIUM

U.S. Department of Energy
Grant #DE-FG02-80IR10905 to
Minnesota Environmental Sciences Foundation, Inc.
from July, 1980 to November, 1981

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I. Summary

The U.S. Department of Energy sponsored an energy education communications network from August, 1980 through November, 1981 for educators and information specialists who deal with K-12 students, vocational training, adult and post-secondary education, and the general public in Illinois, Indiana, Minnesota, Ohio and Wisconsin. The emphasis was on sharing information about energy education materials, workshops, programs, resources, and funding opportunities. Channels used were periodic and special mailings, telephone calls, and quarterly meetings. Members concluded that the Consortium was a cost-effective, valuable service, should be continued and expanded to include other states, and should have more private sector involvement and information exchange. This report gives an overview of the basic workings of the Midwest Energy Education Consortium model, and includes recommendations which might aid others in setting up a similar network.

II. Observations on Networks

A. Some Characteristics of Networking

Networks tend to be made up of diverse participants, brought together over a specific common objective. Several types of networks are possible, with varying levels of formality and commitment. They can range from those having very specific goals (development of a program, passage of legislation) to those which serve primarily as communication links, keeping members informed of developments and opportunities in a specific field.

To stay alive, networks, however informal, need similar tending.

They need some type of fairly regular internal communication, whether by phone, mailings, or meetings. They need to remain open to new ideas, members, strategies and, perhaps, new goals. If they remain closed in all these areas, they tend to stagnate and lose their value to the individual participants.

They need some level of formal coordination to pinpoint responsibilities for network communications, tasks, and organization. In general, this need is filled by a coordinator - paid or volunteer, part or full time, depending on the needs and means of the network. This is really a critical role, for the coordinator becomes the focal point for communication, and can influence whether the network will succeed at all, will move forward as needs and interests shift, or will stagnate and cause members to drop away. In a network made up of people with extremely diverse needs and interests, the coordinator has be to a generalist with strong organizational skills plus an ability to analyze individual needs and match them with internal network resources.

Networks tend to be voluntary organizations. Members will stay active as long as some of their needs are met. Different members, having varied needs and backgrounds, will share in different ways. Needs will probably shift, and the network will have to determine whether it will shift its focus to meet the changing needs of the participants, or whether it will continue to serve its original function, but change its members. A network should be viewed as an active process, as well as an organization.

B. Some Special Strengths of the Midwest Energy Education Consortium

One of the greatest strengths of the Consortium has been the diversity of participants. Although there are loose networks which include K-12 energy educators as a group, and adult/post-secondary educators as a group, and general public information specialists as a group, there is no network which includes them all. The benefit of loosely allying these groups through the Consortium is that many energy materials or programs developed by one group can be adapted for use by the others. Often, for example, materials developed for K-12 can be modified for post-secondary vocational programs. Or materials developed for general public programs can be used as background materials for classroom programs.

Another significant strength of the Consortium has been its regional focus. Although networks with a smaller base (state) or a larger base (national) can also be valuable, the regional focus allows more possibilities for information sharing than does the smaller state network simply because there are more agencies, organizations, companies, and individuals available that wish to develop and share materials. The regional approach has had the advantage of bringing together states trying to meet similar climatic, geographic, and economic problems. It allows a concentration on specific issues which a national approach would preclude. In addition, it keeps the number of participants "manageable," in the sense that it can remain a working group. A national network that included these three different educational sectors would probably include several hundred people, and would be difficult for one person to coordinate successfully. In addition, organizing the Consortium

on a regional basis made it easier to assemble people for periodic meetings.

C. Overview of Accomplishments of the Consortium Network

First, the Consortium has put together a working network of a lot of different educators, no two of whom have the same responsibilities. Over the year, individuals worked out the ways each would share information with and extract information from the group. The unanimous opinion of those attending the final meeting in June, 1981, was that the Consortium was a valuable service which should be continued (See Appendix D for specific comments.)

The Consortium has shared a lot of information. This includes the tasks originally agreed on with DOE (bibliographies, inventories, bulletins) plus many other interchanges via letter, phone, special mailings, and meetings (See Section III G - "Activities" for specifics.). People in the different states have greater access to each other, both directly and through the Consortium.

This access has resulted in several instances of materials and programs being adopted or adapted by other states. (Curriculum development is an expensive process. In Minnesota, for example, the K-6 energy materials development cost was $20,000.) Some of the larger state projects in energy education which have been directly influenced by the Consortium (or by the four preliminary six-state meetings) include:

* Wisconsin used Michigan's building operator's program materials as the cornerstone for its own building operator's program.

* Wisconsin used information from other states (which was passed along at a Consortium meeting) to set up its Residential Conservation Service (RCS) certification program.
* Wisconsin modified the Rochester, MN, Vocational Technical Institute home audit program into a do-it-yourself home audit program, now widely used in their vocational technical program.
* Ohio modelled its analysis of the Ohio National Energy Conservation Policy Act school program on the study and analysis done in Illinois.
* Early Consortium planning and preliminary meetings sparked the initiation of Ohio's energy education programs. Those appointed by the Ohio Superintendent of Education as the Official Ohio Energy Education Team. This group includes people from the Ohio Department of Education, the Ohio Energy Office, universities, and the utility industry. They have been very active in Ohio, and have already done a statewide teacher survey on energy education, held a statewide teacher conference, and are developing energy curriculum materials for Ohio.
* Bowling Green State University, Ohio, uses energy matrices developed by Minnesota in its elementary workshops. These materials identify energy concepts and teaching opportunities in four major elementary textbook series.
* The matrix developed in the early planning days of the Consortium was used to help develop elementary workshop materials used by Bowling Green State University.
* Minnesota and Wisconsin cooperated on the Joint Minnesota-Wisconsin Industrial Energy Needs Assessment.
* Minnesota adopted Wisconsin's residential energy conservation

pamphlet "First Things First."

* Wisconsin Energy Extension Service has used materials on working with local governments developed by the Community Services Department of the Minnesota Energy Agency.
* Illinois modelled its Energy Information Hotline and Clearinghouse on Minnesota's.
* The Illinois Energy and Natural Resources Department, Industrial Division, has modelled its waste heat recovery manual and program on Minnesota's materials.
* Indiana has adapted Minnesota's senior high Industrial Arts energy materials for their own use.
* The Indiana Energy Education Cadre, a network of teachers teaching other teachers about energy education, was developed as a result of exchanging ideas with other states at preliminary Consortium meetings.
* Indiana used research data from Ohio and Minnesota to help determine teacher needs in energy education. Indiana thereby did not have to do its own statewide teacher needs assessment.
* The Consortium served as a catalyst for the development of Wisconsin's Energy CATS (Change Agent Teams) materials for elementary students, and provided ideas for the format.
* Michigan has modelled its energy mini-grant program for teachers on Minnesota's program.

The network has thus proved to its members that it is an efficient, cost-effective way to share resources, thus making time, money, and personnel go further in these days of limited budgets and changing priorities.

The Consortium has also broadened its network contacts to many more educators than the original eight per participating state. These contacts include more in participating states, plus several in adjoining states. Both private and public sector educators have expressed interest in this type of formalized, regional sharing.

As part of this expansion of network contacts, we organized and implemented a ten-state regional energy educators meeting for the National Science Teachers Association (NSTA) in Minneapolis November 13-14. Minneapolis was chosen for the first of five regional meetings specifically because the Consortium network was already in place. This meeting included public sector employees for K-12 and general public education and information, plus private sector educators from energy supply companies and utilities. Public sector invitees included representatives of state education departments and energy offices, principals' associations, social studies liaisons, Council on Economic Education representatives and others. The education liaison for Northern States Power Company was on the local planning committee for this meeting. NSP co-hosted the meeting with the Consortium, providing meeting rooms, refreshments, and other support services.

The Consortium has thus set the stage for evolving into a network that is broader in area and scope. Energy companies and utilities are placing more and more emphasis on energy education. In many states, joint energy education projects are already being developed by private/public sector partnerships. The type of information

exchange typified by the first stage of the Consortium provides an ideal way to share information between private and public sector educators. Adding more states within the confines of the common regional focus would also greatly enrich the information exchanges already taking place. (See Section VI - "Future.")

III. Project Description

A. The Consortium Model

One of the charges to the Consortium from the DOE was to develop a model for a regional energy education network. To satisfy that charge, this report includes an overview of the composition and operations of this pilot project, plus some specific recommendations which we feel would make such a network run more smoothly. Thus, the Project Description section plus the Recommendations section could be used as guidelines for others interested in forming a regional network.

B. Consortium Background

In April, 1978, the Region V Office of the U.S. Department of Energy convened a meeting in Chicago for energy educators and information specialists from Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Attendees came from state Departments of Public Instruction, Energy Offices, University programs, Energy Extension Services, educational consulting firms, and other educational institutions. Representatives of the D.O.E. in Washington and the U.S. Office of Education Energy and Action Center also attended.

The group reviewed energy education programs taking place in the different states and met in subgroups (K-12 and Post-Secondary/Adult) to discuss priorities and future directions. The USOE-Energy and Education Action Center agreed to fund more meetings for the group to develop its joint plans and projects.

Subsequently, the group met in May, September, and November, and produced the following items:

* a matrix for K-12 energy education (from K-12 Subcommittee);
* a priorities schedule for technical and non-technical energy education (from the Post-Secondary/Adult Subcommittee), particularly in technician-auditor training;
* a proposal to establish the Midwest Energy Education Consortium (from the entire group).

This proposal was ultimately funded by the Department of Energy for $50,000 in July, 1980. Participating states also agreed to contribute $2,000 each. A Coordinator was hired in August, 1980, and started September 1, 1980.

C. Purposes of the Consortium

The purposes of the Consortium as expressed in the original proposal are:

"to stimulate activity in the development of programs, materials and delivery strategies at all levels, from Kindergarten through Post-Secondary and Adult levels;"

"to create a structure for and to encourage interaction and sharing among members, both in the program operation and planning process."

The general goal of stimulating increased activity in energy education was approached by giving members lots of information about programs and resources available. (Perhaps the most important part of this information exchange came in the quarterly meetings. People were increasingly interested in discussing programs operating in other states. These round-table and small group exchanges characteristically led people to mention more and more programs, often including programs they had neglected to mention by phone or in written correspondence.) When people are made aware that materials serving a specific interest exist, it is often much easier for them to adopt or adapt them for programs in another state than it is for them to develop brand new materials. In addition, such adaptation allows agencies to save developmental money and time, and to make much more efficient use of their personnel.

The structure that was created was the network structure, with the Coordinator in the central office, relaying information and answering requests. Members were also kept updated as to each other's addresses and phone numbers, and there was substantial direct contact between Consortium members.

D. Membership

Participating states each agreed to contribute $2,000 to the DOE's sum of $50,000. This $2,000 came from various sources within the states, and each state handled this item a little differently. Contributing agencies were state energy offices and various divisions of state departments of education.

Each participating state then selected four delegates (with alternates) to represent state education departments, state energy offices, and post-secondary institutions (including technical/vocational and college/university). Other participants included the DOE-Chicago project manager, the Region V energy education liaison from the U.S. Department of Education, the Executive Director of Minnesota Environmental Sciences Foundation, Inc., and two affiliate members.

The membership category for affiliate members enabled other individuals or organizations interested in energy education to contribute $150 and become non-voting members. The two organizations which joined as affiliates were Northern States Power Company and Mid American Solar Energy Complex (MASEC). (A complete list of members is attached in Appendix A).

E. Location/Fiscal Management

The full time project coordinator has been housed at Minnesota Environmental Sciences Foundation, Inc., a private, non-profit, environmental education organization. In addition to providing office space, MESFI has provided the fiscal management and employed the coordinator. Clerical support was handled by increasing the hours of MESFI's part-time secretary. MESFI charged a management fee of 10% of the total budget. It was felt that locating the project at an independent organization would keep it from appearing to be too closely tied to any single state agency, and would thus contribute to the sense that the Consortium was truly a regional, rather than a state network.

F. Consortium Organization

State delegates and affiliate members formed the Steering Committee. The Steering Committee divided itself into two working committees: the Youth Programs Subcommittee and the Post-Secondary/Adult Subcommittee. The Youth Programs subcommittee was concerned with programs and materials for pre-school to 18 year olds, in school and non-school settings. They were also concerned with education for teachers or leaders of these groups. The Post-Secondary/Adult subcommittee dealt with a wide range of audiences and delivery systems in formal and informal educational settings. These audiences included general public, occupational groups, social/economic groups, people being trained or retrained in different occupations, professional groups, and others.

An Executive Committee managed administrative and policy activities. This group consisted of: one delegate from each state (which included the chairpersons of each subcommittee), the project director, the Executive Director of MESFI, and the liaisons from the Department of Energy and the U.S. Department of Education. The delegate from each state also served as the lead contact for the Consortium within that state and could convene the membership within that state, and when necessary, could help the Coordinator spread information quickly.

G. Activities

Ongoing activities of the Coordinator included seeking out information on energy education programs and materials, answering phone and mail inquiries about energy education, and sending out information

to the members about workshops, pending legislation, materials, funding opportunities, etc. In addition, the Coordinator constantly attempted to reinforce the network concept - encouraging members to use each other as resources whenever possible. Other specific activities included:

a) arranging for quarterly Consortium meetings during the year of the program. This included making all meeting arrangements, notifying people, and helping set the agenda.

b) organizing and implementing a 10-state meeting for energy educators involved in K-12 education. This meeting, sponsored by the National Science Teachers Association, also featured strong involvement with the private sector. It was held in Minneapolis November 13-14, 1981.

c) producing bibliographies of curriculum materials and sources. The Coordinator compiled three bibliographies: two for K-12 materials and one for adult/post-secondary materials.

d) producing inventories of energy projects in the region. Two inventories were produced: one for education projects and one for community projects.

e) producing periodic bulletins, with information about workshops, resources, funding, and projects. Bulletins were produced in October 1980 and January, February, March, April, May, June, July, August, September, and November of 1981. Bulletins for October, February, May, and September were mailed to every state energy office in the U.S., in addition to the Consortium membership.

f) mailing out special notices about funding opportunities, workshops, and (on request) energy legislation, plus reprints

of energy articles and bibliographies from other sources.

g) promoting the sharing of materials between states - both member and non-member.

h) writing quarterly reports which were mailed to the membership and the DOE.

i) working to extend the life of the Consortium (and to expand its membership and scope). Twelve proposals were produced. Several of these are still pending. More will be written under the auspices of MESFI after the grant period has ended.

j) coordinating as much as possible with other networks. Some of the networks contacted include:

Energy and Education Action Center (U.S. Education Dept.)
National Science Teachers Association
Mid American Solar Energy Complex (MASEC)
Energy Network Project (Minnesota)
East Central Network (formerly East Central Curriculum Management Center)
Education Commission of the States Energy Project
Neighborhood Information Sharing Exchange (NISE)
Stimulating the Neighborhood Action Process (SNAP)
Minnesota Adult Post-Secondary Energy Education Advisory Committee
Wisconsin Vocational Technical Adult Education Energy Liaison Committee
The American Vocational Association
Self Reliance Center (Minnesota)

H. Changes From Original Grant

1. There was a change in participating states. In September, Michigan decided to drop out, citing a change in priorities of the state Energy Administration.
2. The Illinois Department of Energy and Natural Resources contributed $1,000 to the Consortium, as originally planned. The Illinois State Board of Education did not share in funding the

project.

3. Clerical support for the project was handled by extending the hours of MESFI's part-time secretary, rather than by hiring someone specifically to work on the project.
4. The grant was given a no-cost extension, and ran its office from September 1, 1980, through November 30, 1981, with an organizational meeting scheduled in August, 1980, immediately after the Coordinator was hired.

IV. Recommendations

A. Written Agreements

One important step is to get agreement in writing about financial support and participation from the parties that will be involved. This should help prevent situations such as those which occurred with Michigan and Illinois, and enable the project to be assured of its initial budget and participation support. An example of an agreement for the Northeastern Vocational Energy Education Consortium is included in Appendix C .

B. Organization

The organizational structure of the Consortium should be made somewhat clearer. In the present model, the Coordinator answers directly to the Executive Director of MESFI, the Project Director, the Executive Committee (and its chairperson), and the DOE representative. The hierarchy of how these groups and individuals relate to/rank with each other should be better defined. The fact that this rather vague diffusion of power did not present many problems was due to the personalities involved. A better organiza-

tional framework would, perhaps, be one in which it is clearly stated that the Project Coordinator answers directly to only two individuals - the Project Director and the Executive Committee Chairperson. This would probably help prevent the kinds of procedural "bogging down" which happened occasionally at the quarterly meetings.

C. Duration of Pilot Project

To get a network like this one built and operating efficiently and well, more than a year is needed. (It took about two months after the grant was approved to hire the Coordinator.) Although participants for this network had already been chosen by the time the project started, many did not know each other, and most did not know the Coordinator. There seemed to be a certain amount of time (and meetings) necessary before people were working together efficiently. That is, people had to sort out their own roles in relationship to the Coordinator and to the rest of the network. They also had to determine their own levels of commitment to and participation in the sharing system of the network. A factor which may have extended the time needed for the group to develop the cooperation necessary was probably the extreme budget pressure felt in most Midwestern state agencies during the past year. People were reassigned within their agencies, they had budgets cut, and time priorities were reallocated.

Admittedly, this observation about the amount of time needed to get a network working well is somewhat subjective and rather hard to document. However, it did seem to the Coordinator that it

took six to eight months until many participants realized how the Consortium could aid them and what kind of efforts they had to contribute to make the network operate. (For some, it seemed, once a Coordinator was hired, all individual responsibility for sharing information ended.)

A project in which the participants had not even been chosen by the project's beginning would almost certainly need more time than a year to be successful.

Another reason for needing more time is that a task assigned the Coordinator was to search for ways to continue the network after DOE funding was withdrawn. Some "start-up" time was necessary to get participants committed to this sharing system. In addition, sufficient time was needed to produce enough bibliographies, inventories, bulletins, etc., to demonstrate that the Consortium would be a worthwhile service and the kind of project which other organizations (such as corporations or foundations) might be interested in funding or joining.

D. Representation

The participants representing public agencies should be carefully selected to be those who are truly active in the field of energy education. These people are much more likely to contribute actively and voluntarily to the two-way sharing necessary for network success than are people who may have been chosen by virtue of job title, rather than actual interest. Some provision should also be made for membership from a state to change, as the focus shifts or as peoples' needs or responsibilities change.

For example, heavier involvement of the private sector in a second phase of the Consortium will probably mark a shift both in membership and in member needs. Another needs shift will come as members move from the stage of developing materials to the stage of disseminating them and, ultimately, evaluating their effects.

E. Meetings

Occasional meetings are important. They give participants an opportunity to come together in a common cause, to get to know each other, and to build a level of trust. In addition, a different, more comprehensive kind of sharing appears to take place at these meetings than takes place by phone or letter. A network should have at least two meetings per year, if possible, and more meetings if funds can be found.

F. Private Sector Involvement

There should be much greater involvement with private sector energy educators in a network like this. Their role in energy education is expanding. In fact, there have been many very successful energy education projects in Consortium states during the past year with the private and public sectors cooperating. Sharing information among all groups would be of benefit to all.

Certainly, membership categories should be restructured, as should be the allocation of voting privileges. One promising possibility might be to simply allow each participating state the same number of votes, and let each state determine its own mix of vote holders from the private and public sector. This would allow each state

delegation to contain any number of participants. In this instance, funding could come from any source or mix of sources.

(Another possibility might be to allocate membership and voting strictly on the basis of paid memberships. However, this system, at least in the near future, would probably have the disadvantage of eliminating some public agencies during this time of austere budgets.)

It should be noted that the structure of the original Consortium, as mentioned above, had some confusion built in regarding procedural matters. As restructured, an expanded Consortium could have less focus on procedural items, and thus much less need to be concerned about voting representation.

G. Internal Communications

The importance of regular, frequent two-way communication between the Coordinator and all the members cannot be overemphasized. Networks should plan on issuing frequent bulletins or short newsletters or general letters. Members are generally very busy people, and frequent communication may not only bring them some helpful information, but - by its very appearance - serves to remind them of the network itself and their roles in it.

The Coordinator should be in regular (monthly or bimonthly) phone contact with the state liaison, at least (depending on the number participating in the network), to find out what's happening or whom to call in that state.

As noted in section E, above, meetings of members are important for the special communications opportunities they provide. In addition, it is important for the Coordinator to be able to travel to participating states, especially in the early stages of the project. Such trips, besides offering excellent opportunities to exchange information, also provide the Coordinator a chance to sell the Consortium idea to more people, and thus expand the base of people the group has to draw upon.

In addition, specific information needs of individual members should also be identified and, to the extent possible, met by the Coordinator or by referrals by the Coordinator to other sources, both inside and outside the network.

H. External Communications

There should be substantial outreach right away to networks and other organizations outside the official network members. It takes quite a while to build the kind of peripheral information support (newsletters, periodicals, agency contacts, data base access, etc.) the Coordinator needs to keep information flowing within the system. (That is another reason for having a pilot project last longer than a year.) Many other organizations and individuals are enthusiastic about trading information, and such exchanges outside the official network can greatly benefit all concerned. (This includes sources inside and outside the participating states.)

I. Location of the Office

The office location for a network serving such a diversity of

interests should be carefully chosen to keep the network from appearing to be dominated by one interest group or agency. The Coordinator should be sure to steer clear of any policy or personnel disputes within any state or state agency. Having the office located with a "neutral" agency helps avoid both of these possible pitfalls.

V. Evaluation

Evaluation was handled in an informal, ongoing way through the project. A final, informal evaluation session was held by the group attending the Madison meeting in June. Members were in unanimous agreement that the project should be continued if funding could be found. (See Appendix D for specific comments from that meeting about the value of the Consortium.)

In addition, Appendix H contains letters of endorsement for another year of an expanded Consortium. Most of these letters are quite specific about services of the Consortium that the member found most valuable.

Evaluation was also dealt with in terms of planning for a second year. At the February 19 meeting, the subcommittees drew up priority lists of what they wanted to see a network do for them. These lists are also included in Appendix E . In keeping with these suggestions, two basic proposals have been written: one requesting full funding (for a half-time coordinator for 16 months and for two conferences) and one for a half-time office only (assuming the coordinator would continue seeking funds for network meetings). Both proposal summaries

are included in Appendix F .

Consortium members at the Madison meeting felt that the Consortium provided valuable services and as such, should be operated as a full-time office. They agreed to seek funding in their own states to expand the scope and services mentioned in the proposal.

The proposal for the second year also incorporates the evaluation of the staff into suggested membership and operating procedures. (See Recommendations section above.)

VI. Future

Because Consortium members would like to keep the network alive, and to expand it, the Coordinator has written several grant proposals. Using remaining state funds (with the agreement of the Consortium Executive Committee and under the auspices of MESFI), she will continue to write more, even after the DOE involvement terminated November 30, 1981. (Copies of the proposal summaries are in Appendix F .) Other funding possibilities are also being investigated and pursued.

The proposals include the following major changes from the first year's operation:

* expansion to include private sector energy educators as full partners in the network;
* expansion of the region served from five states to twelve, adding Iowa, Kansas, Michigan, Missouri, Nebraska, North Dakota and South Dakota. (Contacts have been made in most

of these states, and the network idea has been well received.);

* funding the Coordinator position half-time, with expanded hours and services possible as the states locate more funding;
* scheduling an annual meeting, rather than quarterly meetings, with participants asked for a commitment to doing follow-up work together between the two meetings (As noted above, more meetings are preferable, but funding for additional meetings would be sought in other ways, through other proposals.);
* changing the meeting format to having more of a workshop approach (yet still allowing ample time for resource sharing);
* producing a bimonthly newsletter, with interim information mailings as needed;
* planning for a 16-month period, to allow for two conferences about a year apart.

Plans for a second phase of the Consortium can be taken as a whole, or be broken down into three parts (or three separate proposals): office support only, first conference support, and second conference support.

Members are committed to trying to keep this network alive. It is unique in that it is the first and only common forum for professionals who serve the different audiences of K-12 students, vocational and post-secondary students, classroom teachers, and the general public. By keeping members informed of regional and national programs and materials, it helps prevent duplication in materials, and can thus both cut costs and encourage more energy education programming. In these times of austere budgets and changing priorities, this information-sharing system helps make time, money, and personnel resources go farther. It provides important services which we hope to maintain.

VII. Appendices

A. Member List

B. Consortium Publications

C. Northeastern Vocational Energy Education Consortium Agreement

D. Statements from Consortium Members About Value of Consortium

E. Subcommittee Priorities for the Consortium

F. Proposal Summaries

G. Overview Letter from Consortium Chairman

H. Letters of Endorsement for a New Proposal

I. Financial Report

Revised 11/24/81

Appendix A

Midwest Energy Education Consortium

GENERAL MEMBERSHIP LIST

Members at Large

(312) 972-2016
Susanne M. Czerwinski*
Public Information Specialist
U.S. Department of Energy
Building 2
9800 S. Cass Avenue
Argonne, IL 60439

(312) 353-5219
Mr. John Sasuta*
U.S. Department of Education
300 S. Wacker Dr. 32nd Floor
Chicago, IL 60606

(612) 642-9046
Mr. Edward Hessler*
MN Environmental Sciences
Foundation, Inc.
Room 312 Security Bldg.
2395 University Avenue
St. Paul, MN 55114

(612) 642-9046
Molly Redmond, Coordinator
Midwest Energy Education Consortium
Room 312 Security Bldg.
2395 University Avenue
St. Paul, MN 55114

	Team Members	Alternates
ILLINOIS		
(217) 785-8578	Mr. Forrest Lupu* IL Inst. of Natural Resources Room 300, 325 W. Adams Street Springfield, IL 62706	Evelyn Tyner Loop College 64 East Lane Street Chicago, IL 60601 (312) 269-8056
(217) 782-5235	Mr. George Pintar IL State Board of Education 100 North First Street Springfield, IL 62777	Mr. Bill McClard IL State Board of Education 100 North First Street Springfield, IL 62777 (217) 782-6090
(217) 782-0365	Mr. Don Roderick IL State Board of Education 100 North First Street Springfield, IL 62777	

* Executive Committee Member

	Team Members	Alternates
OHIO		
(419) 372-0489	Dr. Berry Cobb, Administrator Community Energy Policy Office Bowling Green State Univ. Physics Department Bowling Green, OH 43403	Diane Harper Community Relations Rep. Dayton Power and Light Courthouse Plaza S.W. Dayton, OH 45401 (513) 224-6275
(614) 466-1865	Mr. Kenneth Cristofani Planning Administrator Ohio Department of Energy State Office Tower, 34th Floor 30 East Broad Street Columbus, OH 43215	Karen Heath, Supervisor OH Department of Education Division of Voc. Ed. Home Economics/Consumer Ed. 65 South Front St. - Rm. 912 Columbus, OH 43215 (614) 466-3046
(614) 466-5015	Dr. John Hug, Consultant* Ohio Dept. of Education Division of Personnel, Publications and Legal Services Environmental & Energy Ed. 65 South Front St. - Room 811 Columbus, OH 43215	Ed LeBlanc Ohio Dept. of Education Energy Assistance Office 65 South Front St. - Rm. 419 Columbus, OH 43215 (614) 466-9855
(614) 466-4526	Mr. Harry R. Meek, Manager Ohio Dept. of Education Energy Assistance Office 65 South Front St. - Room 419 Columbus, OH 43215	Mary K. Walsh Educational Serv. Coord. Columbus & Southern OH Elec. 215 North Front Street Columbus, OH 43215 (614) 464-7291
INDIANA		
(317) 232-8982	Ms. Linda Shapiro Indiana Energy Group 440 North Meridian Street Indianapolis, IN 46204	Ms. Pam Popovich Muncie Area Career Center 2500 N. Elgin Street Muncie, IN 47303 (317) 747-5250
(317) 927-0111	Mr. Joe Wright* Indiana Department of Public Instruction 229 State House Indianapolis, IN 46204	George Cannon IN Dept. of Public Instr. 229 State House Indianapolis, IN 46204 (317) 927-0111
(812) 232-6311 x2636	Mr. Marshall Parks Science Teaching Center Indiana State University Terre Haute, IN 47809	Mr. Bob Hedding Indiana Energy Group 440 North Meridian Street Indianapolis, IN 46204 (317) 232-8940
(317) 747-5240	Mr. Anthony Wesolowski D.P. of Voc/Tech. Education Muncie Area Career Center 2500 N. Elgin Street Muncie, IN 47303	Walt Cory, Jr. Indiana University Bloomington, IN 47405 (812) 332-9785

* Executive Committee Member

	Team Members	Alternates
WISCONSIN		
(608) 266-3316	Dr. Sherman Ansell, Energy Consultant WI Vo. Tech. Adult Ed. Board 4802 Sheboygan Ave. Room. 701 Madison, WI 53702	Mr. Arnold Potthast WI Vo Tech Adult Ed. Board 4802 Sheboygan Ave. Rm. 701 Madison, WI 53702 (608) 266-7697
(608) 263-1662	Mr. William Bernhagen, Director WI Energy Extension Service Rm. 437 Extension Bldg. 432 North Lake Street Madison, WI 53706	Dr. Kenneth Dowling Supervisor, Science Ed. Dept. of Public Instruction GEF 3, 125 S. Webster St. Madison, WI 53702 (608) 266-3319
(608) 267-9266	Mr. David Engleson Supervisor of Environment, Energy & Marine Education Dept. of Public Instruction GEF 3, 125 S. Webster Street Madison, WI 53702	
(608) 266-8871	Ms. Barbara Samuel* Division of State Energy Dept. of Administration 101 S. Webster St., 8th Floor Madison, WI 53702	
MINNESOTA		
(612) 296-4071	Mr. Richard Clark* Science Education Specialist MN Department of Education 642 Capitol Square Bldg. St. Paul, MN 55101	Mr. Gil Valdez MN Dept. of Education Capitol Square Bldg. St. Paul, MN 55101 (612) 296-4067
(612) 373-2451	Dr. Peter G. Roll, Spec. Asst, Academic Adm., 217 Morrill Hall University of Minnesota 100 Church Street S.E. Minneapolis, MN 55455	Mr. Paul Seymour MN Energy Agency 980 American Center Bldg. 150 East Kellogg Blvd. St. Paul, MN 55101 (612) 297-2323
(612) 296-8492	Ms. Jackie Lind Minnesota Energy Agency 980 American Center Bldg. 150 East Kellogg Blvd. St. Paul, MN 55101	Tom Ryerson Ind. Education Supervisor MN Dept. of Education 518 Capitol Square Bldg. St. Paul, MN 55101 (612) 296-3306
(612) 296-6516	Mr. Jerome Schmehl* Program Development Specialist MN Department of Education Division of Vocational-Tech. 549 Capitol Square Bldg. St. Paul, MN 55101	

* Executive Committee Member

AFFILIATE MEMBERS

Mr. Don Witt
Mid-American Solar Energy Complex (MASEC)
8140 - 26th Avenue South
Bloomington, MN 55420
(612) 853-0400

Mr. Richard Stanford
Education Liaison
Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401
(612) 330-6042

Appendix B

Consortium Publications

1. Bibliographies and inventories

   A K-12 Bibliography of Energy Education Materials & Resources

   A K-12 Bibliography of Energy Education Materials - Update

   Energy Resources for Post Secondary & Adult Education

   Energy Education Programs

   Community Energy Projects

2. Bulletins of resources, workshops, funding possibilities and general information, to members for the months of October, 1980, and January, February, March, April, May, June, July, August, September, and November of 1981.

3. Four quarterly reports

4. Final report

Appendix C

Northeastern Vocational Energy Education Consortium

Memorandum of Understanding

1980

During the interim period while a detailed formal agreement is being compiled we the undersigned representing the nine participating states reaffirm our commitment and continued support for the establishment and operation of the consortium.

Secondly, the consortium shall be administered by the Pennsylvania State Department of Education, Bureau of Vocational Education under the policies established by the Board of Director of the consortium.

The Consortium members accept the responsibility for responding to the need for identifying the jobs required by the emerging technologies in energy and developing vocational energy educational programs. This will place individuals in industry coupled with the development of skills which will be required by the new energy technologies.

Finally, the administering agency is encouraged to actively seek funds in behalf of the consortium but with the approval of the Board of Directors and/or a respective designee. June 30, 1981.

Delaware	New York
Maine	Pennsylvania
Massachusetts	Rhode Island
New Hampshire	Vermont
New Jersey	Puerto Rico
	Connecticut

State Director of Vocational Education

Northeastern Vocational Energy

Education Consortium

MEMBERSHIP AGREEMENT

A program of interstate cooperation for identifying jobs required for emerging technologies in energy and designing, developing or modifying vocational education programs which train people for existing jobs.

This AGREEMENT is made this day _____ between _____ and the Northeastern Vocational Energy Education Consortium through its administering agency, the Pennsylvania State Department of Education. The provisions and conditions of the agreement are to be administered by the administering agency under the guidelines and general directions of the Board of Directors of the Consortium and the established laws, regulations, and procedures under which the administering agency operates.

1. This agreement is for a period of (1) one year starting July 1, 1981 through June 30, 1982 and will be renegotiable annually within 60 days prior to its expiration in a manner determined by the Board of Directors.
2. The accounting of all moneys received by or in behalf of the consortium shall be through the administering agency in accordance with state agency regulations and procedures.
3. All materials produced by the efforts of and supported by the funds received by the consortium shall be considered in the public domain and shall be disseminated in a manner to be determined by the Conosrtium's Board of Directors.
4. It is understood that the Board of Directors shall be composed of the representatives of each state, participating with each state having one vote on the Board.

5. The annual contribution from each state educational agency for the administrative and coordination costs of the consortium, in the absence or inadequacy of other funding sources for this support, shall be in an equitable manner as determined by the Board of Directors and subject to the approval of each participating states.

The member states educational agencies hereby agree to the constitution and bylaws of the consortium for the period in which this renewal agreement is in effect, as per attachments A and B.

When necessary, this agreement may be amended with the mutual consent of the Board of Directors of the Consortium and the participating state as indicated above.

_____

_____

Statements from Consortium Members About the Value of the Consortium, June 10-11, 1981 Meeting

Harry Meek mentioned that the very fact that the group exists, meets, and shares information puts positive pressure on the individuals involved to spur activities in their own states.

Joe Wright thought the Coordinator's visit to Indiana helped commitment within the state.
- He also mentioned that teacher materials from other states are being used.
- Research such as the teacher needs assessments from Minnesota and Ohio has helped Indiana to shortcut some long and time consuming surveys.
- He has gotten to know some very helpful people through Marti Rosenbaum and the Chicago D.O.E. office.
- He has increased access to schools and programs.

Barbara Samuel emphasized the importance of contacts within the group, and information including: sharing resources of other states; what has been tried and whether or not it worked; and how can a new idea be applied to Wisconsin.
- She would look forward to expanded membership (both from new states and agencies, and from other groups interested in energy).
- She would like to see more participation from public information officers and others whose target audience is the general public.

Sherman Ansell mentioned that he liked the diversity of people now meeting with the group.

Mary Kay Walsh said that the Consortium functioned as a public relations tool for energy education in Ohio. It becomes something of a drawing card and allows reporting of different programs and materials.

Alison Heins said that the Consortium has proved a valuable resource base, especially for curriculum materials.

Bill Bernhagen said that the Consortium has served as a catalyst for the development of Wisconsin's Energy CATS (Change Agent Teams) materials.

Barry Cobb mentioned that he found the interaction with other educators valuable.
- He also found the newsletter information valuable.
- He feels the group has stimulated cooperation with utilities.
- He has also found materials for adoption.

Dick Clark mentioned that Minnesota's involvement with MEEC has been reported to the state legislature's Joint Committee on Energy. He feels it gives the Education Department's energy programs more credibility. It also emphasizes to the legislature the fact that the Department has regional involvement.

Forrest Lupu said that it always elicits great interest from teachers when he mentions the Consortium.

John Sasuta said that the network concept is catching on, and he is sharing our information with his regional liaisons around the country. He said that the Consortium is serving as a model, generating and sharing materials.

Subcommittee Priorities for the Consortium

At the February 19, 1981 quarterly Consortium meeting, the subcommittees discussed priorities in network services for a second year. The participants agreed that the Consortium provided valuable services to them, and should be continued. Each grouped handled the ranking of priorities in a slightly different fashion.

1. Youth Programs Subcommittee

This group made up a chart which ranks priorities in terms of percent of the job which could be funded, adding duties as job time increases.

1. 30% of full time	Maintain mail exchange of information, lists, programs, and contacts
2. 30% of full time, plus 2 months full time	Conduct a regional leadership conference or workshop for key energy education people from member states
3. 75% of full time	Conduct a cooperative needs assessment
4. 100% of full time	Cooperatively develop new curriculum materials using matrix document format
5. 100% plus of full time	Develop a cooperative delivery system

2. Post-Secondary Subcommittee

These are ranked with the most important item first.

1. Maintain current office and personnel
2. Maintain or expand production of bibliographies and inventories and their distribution.
3. Hold a 2-3 day annual conference for Consortium members and school officials.
4. Establish teacher education/inservice training workshops.
5. 1-2 meetings per year for Consortium members.
6. Address energy problems and policy, coordinate programs, develop materials.

Appendix F

Proposal Summary

The Midwest Energy Education Consortium is a network of energy educators in Illinois, Indiana, Minnesota, Ohio, and Wisconsin. The network, formed in 1980 and funded through November, 1981, fosters communications and exchange of energy programs and materials throughout Midwestern states. It is unique in that it includes K-12 educators, post-secondary university and vocational educators, and general public (and consumer) information specialists in the same group. The Consortium, by informing members of available programs and materials, encourages cooperation (rather than duplication of effort) and thus makes money, time, and personnel resources go further. The project is housed at Minnesota Environmental Sciences Foundation, Inc., a private, non-profit, tax exempt educational organization, primarily involved in producing curriculum materials.

When the Consortium started, it was primarily composed of public sector educators from state energy offices, departments of education, and universities. It is now time to expand this group to include the private sector educators in energy - many of whom have already been involved in joint projects with Consortium members. The Consortium is also ready for expansion into several other midwestern states (Iowa, Kansas, Michigan, Missouri, Nebraska, North Dakota and South Dakota). Many new contacts have been made in both private and public sectors, and the idea of building a new, expanded network has been met with enthusiasm.

Consortium activities focus on sharing information about programs and materials among participants. It also encourages strengthening communications, cooperation and network-building within cooperating states. To achieve these ends, the next phase of the Consortium has three major components. Funding is being sought separately for each one:

* retention of an office, staffed 50% time. The office would produce a bimonthly newsletter, seek out and encourage participation and information sharing by different state agencies and private sector educators, search out energy materials, look for funding to expand services, and help match member needs with available resources.

* sponsor an organizational conference, which would focus on acquainting participants with each other; encouraging joint projects; showing what resources are available; developing techniques for cooperative programs; and presenting strategies for network building between different agencies, private sector groups, and audiences within a state.

* sponsor a second conference, about a year later, which would build on the first conference. The second conference would concentrate on sharing programs, materials, and strategies developed during the previous year.

We are asking that the _____ Foundation grant $32,770 support for the Consortium office, staffed half time, for 16 months.

A budget worksheet is attached.

ESTIMATED BUDGET WORKSHEET

for 16-month Office Operation

Salaries & Benefits		
Secretary, 25% time - $275/mo x 16	$ 4,400	
Coordinator, 50% time - $900/mo x 16	14,400	
Social Security/Unemployment	1,500	
		$ 20,300
Office Supplies/Communications		
Postage	$ 650	
Phone (average $125/mo + base cost)	2,700	
Energy materials/subscriptions	500	
Office Supplies/letterhead	320	
Duplicating/printing	750	
		4,920
Coordinator Travel to Other States: 6 trips @ $325/ea		1,950
Mileage - $30/month		480
Office rent, lights, administration		5,120
ESTIMATED OFFICE OPERATION TOTAL FOR 16-MONTH OPERATION:		$ 32,770

Proposal Summary

The Midwest Energy Education Consortium is a network of energy educators in Illinois, Indiana, Minnesota, Ohio, and Wisconsin. The network, formed in 1980 and funded through November, 1981, fosters communications and exchange of energy programs and materials throughout Midwestern states. It is unique in that it includes K-12 educators, post-secondary university and vocational educators, and general public (and consumer) information specialists in the same group. The Consortium, by informing members of available programs and materials, encourages cooperation (rather than duplication of effort) and thus makes money, time, and personnel resources go further. The project is housed at Minnesota Environmental Sciences Foundation, Inc., a private, non-profit, tax exempt educational organization, primarily involved in producing curriculum materials.

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* sponsor an organizational conference, which would focus on acquainting participants with each other; encouraging joint projects; showing what resources are available; developing techniques for cooperative programs; and presenting strategies for network building between different agencies, private sector groups, and audiences within a state.

* sponsor a second conference, about a year later, which would build on the first conference. The second conference would concentrate on sharing programs, materials, and strategies developed during the previous year.

We are asking that the _____ Foundation grant $80,950 for support of the project for 16 months. A budget worksheet is attached.

Office plus two conferences

ESTIMATED BUDGET WORKSHEET

Initial Conference

Mailings - three to 100 people (2 pre, 1 post)	$ 105	
Telephone	125	
Coordinator (equivalent of 1 month fulltime)	1,800	
Social Security/Unemployment	130	
Duplicating/Printing	150	
		$ 2,310
Lodging:*		
Curtis Hotel rate -		
$45/night x 50 persons x 2 nights + 10% tax	$ 4,950	
Meals:*		
Curtis Hotel rate -		
Breakfast - average - $4.50 x 100 + 19% (tax & tip)	535	
Lunch - " $6.00 x 100 + 19% " "	714	
Dinner - " $12.00 x 50 + 19% " "	714	
Coffee - 6 gallons (2 gal. each time) @ $10 + 5%	63	
Rolls	57	
Limo Service from airport*		
$3.50 x 50 persons x 2	350	
Participant travel subsidy*		
$225 x 50 persons	11,250	
Speakers		
4 - estimate $500 travel costs & honorarium each	2,000	
		20,633
Total - Initial Conference:		$ 22,943

Second Conference

Same as 1st conference + 10% to allow for inflation $ 25,237

ESTIMATED TOTAL FOR 16-MONTH OPERATION:

Office Operation	$ 32,770
1st Conference	22,943
2nd Conference	25,237
TOTAL:	$ 80 950

* Conference costs to the limits noted would be reimbursed for four delegates per state, allocated at the state's discretion. (As many could attend without reimbursement as wished to come.)

STATE OF OHIO
DEPARTMENT OF EDUCATION
COLUMBUS
43215

FRANKLIN B. WALTER
SUPERINTENDENT OF
PUBLIC INSTRUCTION

DIVISION OF PERSONNEL
PUBLICATIONS and LEGAL SERVICES
OFFICE OF ENVIRONMENTAL EDUCATION
614-466-5015

December 10, 1981

Ms. Molly Redmond
Midwest Energy Educ. Consortium
Room 312 Security Avenue
St. Paul, Minnesota 55114

Dear Ms. Redmond,

The Midwest Energy Education Consortium has contributed significantly to the advancement of energy education in the member states. This experiment in networking has been unexpectedly successful. The voluntary efforts to share information among members helped each one who gave and each one who received. These efforts resulted in numerous publications with current and future usability.

In Ohio the existence of the Consortium caused a committee of eight people to keep in touch with each other by mail and regular planning meetings. This resulted in the planning and execution this past November of our first annual energy education conference for educators. The influence of the Consortium will continue to be felt in future energy education efforts here in Ohio.

You are to be commended for your excellent human relations, writing, and organizational skills in making this project one of exemplary quality.

Sincerely,

John Hug

Dr. John Hug,
Chairperson
Midwest Energy Education Consortium

JH/db

"An Equal Opportunity Employer"

Appendix H

Letters of Endorsement for Expanding and Extending the Consortium

Illinois

Indiana

Michigan

Minnesota

Ohio

Wisconsin

Illinois Institute of Natural Resources

Room 300, 325 West Adams Street
Springfield, IL 62706
217/785-2800

July 1, 1981

Mr. John Hug
Executive Director
Midwest Energy Education Consortium
5430 Greenwood Avenue
Minneapolis, MN 55422

Dear John:

Now that the first year of the Midwest Energy Education Consortium has come to a close, we in Illinois have found it to be an extremely beneficial year. Many of the activities of the Consortium have been profitable not only to the Energy Extension Division but to other agencies in Illinois. Some of the agencies/departments which have requested information about and from the Midwest Energy Education Consortium include the following:

The State Board of Education
Division of Community Education
Department of Conservation
State Library System
The Illinois Association of Community Action Program
The Office of Voluntary Citizen Participation
The State Community College Board
Department of Public Health
The Cooperative Extension Service
State Board of Higher Education
Department of Commerce and Community Affairs

It would be a shame if funding for this second year could not be found since all the work and effort establishing this communication network has already taken place. Another year would see even better results for energy education in Illinois and throughout the Midwest.

If funding can be found for any of the activities which the Consortium is responsible for, especially producing bibliographies of projects and materials, it should be wholeheartedly pursued. My hope is that we will secure funding to continue another year, even if it means a minimum of meetings and materials being produced.

If there is any way in which I can further our cause for continuation of the Midwest Energy Education Consortium, please contact me at your earliest convenience.

Sincerely,

R. Forrest Lupu

R. Forrest Lupu
Special Assistant
Energy Extension Division

RFL:dr

cc: Steve Thomas

State of INDIANA

Department of Public Instruction
Harold H. Negley, Superintendent
Room 229, State House • Indianapolis 46204
317/232-6610

Division of Curriculum
Room 229, State House
317/927-0111

April 9, 1981

Mrs. Molly Redmond
Coordinator
Midwest Energy
Education Consortium
5530 Glenwood Avenue
Minneapolis, Minnesota 55422

Dear Mrs. Redmond:

I recommend your proposal for continuation of the Midwest Energy Education Consortium be funded. Successful implementation of the goals and objectives outlined in your proposal will enhance the efforts of the energy education staff in Indiana to design quality programs for elementary and secondary classroom teachers and students.

Thank you for making our job in Indina easier by providing access to excellent materials and resources in the Midwest and nation. Your services have saved taxpayers thousands of dollars by providing our staff with copies of energy education curriculum and resources already written, pilot tested and evaluated in other states.

We look forward to assisting you and other states in the Midwest with the projects you have planned for 1981-82 school year. You can definitly count on Indiana for support.

Sincerely,

Joe Wright
Energy Consultant

JW/bc

cc: George Cannon
Mike Hennegan

Office Location: 3833 N. Meridien St., Indianapolis

INDIANA STATE UNIVERSITY TERRE HAUTE, INDIANA 47809

SCIENCE TEACHING CENTER (812) 232-6311

July 8, 1981

Molly Redmond, Coordinator
Midwest Energy Education Consortium
5430 Glenwood Avenue
Minneapolis, Minnesota 55422

Dear Molly:

The Midwest Energy Education Consortium is to be complimented for efforts in energy education. The Consortium has enabled several states to establish and maintain an important formal communications network and promote the sharing of information expertise and resources.

Quality energy education remains a top priority of higher education in the United States and the Consortium can help make this goal attainable. As a college professor, I strongly endorse your efforts to obtain support for your invaluable efforts.

Sincerely,

Marshall Parks

Dr. Marshall E. Parks
Science Teaching Center
Indiana State University
Terre Haute, Indiana 47809

MEP:eiy

Jordan College

360 W. PINE ST. • CEDAR SPRINGS, MICHIGAN 49319 • (616) 696-1180

July 6, 1981

Molly Redmond, Coordinator
Midwest Energy Education Consortium
5430 Glenwood Avenue
Minneapolis, MN 55422

Dear Molly,

I am writing to express appreciation for my participation in the Midwest Energy Education Consortium and my support for its continuation for at least another year. I feel privileged to have been the sole representative from Michigan but regret that other agencies felt unable to become involved this first year.

As Jordan College Energy Institute Librarian I have benefitted from the Consortium in several ways. Obviously, the bulletins, newsletters and bibliographies are valuable resources for our library, and both faculty and students have been helped by them. A less obvious benefit is that I now have, throughout the five member states, an "invisible college" of professional contacts with expertise in energy education. Less tangible yet is the benefit of sharing enthusiasm for our work in energy and recognizing more poignantly its importance in these times of dwindling non-renewable resources.

I am excited about the possible new directions for the MEEC that have been suggested for another year. The MERIC data base at the Michigan State Library is available to us. We could enter any of the items from the bibliographies and also compose a human resource file. All entries could be readily updated, and all resources would be available on line to anyone with a telephone coupler. Copies of the tapes could be made available to any member. This data base could be a significant contribution of the State of Michigan to the Consortium, should we choose to use it.

I think it would be wise to broaden our representation of membership, as discussed, to include organizations with interest in energy education that lie outside the normally thought-of educational channels, and to include a wider geographic scope. The Coordinator's function as a link between resources and resource-seekers (a role in which you have already demonstrated gracious proficiency) should be strengthened.

I personally look forward to serving as a link between the MEEC and our State Library and with our Lakeland Library Cooperative system, and to working cooperatively with the State Board of Education and the Michigan Energy Administration.

The Consortium has spent its first year getting activities underway and gaining momentum. I heartily endorse a second year to keep this good ball rolling.

Sincerely yours,

Alison Heins

Alison Heins

minnesota energy agency
980 american center building • 150 east kellogg boulevard • st. paul, minnesota 55101 • (612) 296-5120

August 25, 1981

Ms. Molly Redmond, Coordinator
Midwest Energy Education Consortium
5430 Glenwood Avenue
Minneapolis, Minnesota 55422

Dear Ms. Redmond:

The Minnesota Energy Agency supports your efforts to seek funding for the continuation of the Midwest Energy Education Consortium. During these times of diminishing staff and budget allocations, it is particularly important to keep informed of programs being planned by other states in order to avoid unnecessary duplication and maximize the efforts of those involved in promoting energy education.

This Agency has been closely involved in the initial development of the Consortium, and will continue to support its efforts to the extent that staff and budget limitations will allow. Our Agency's involvement with the Consortium has resulted in increased coordination with other states in planning and implementing energy education programs. The mailings from the Consortium have been valuable in alerting our staff to coming events and programs being planned in our neighboring states. Programs on the elementary, secondary, post-secondary, and adult levels would benefit from continued multi-state contacts, particularly if the Consortium can be expanded to include states beyond the Department of Energy Region V network. Regional conferences would greatly assist staff in identifying resources from other states to use when planning specific workshops.

We encourage you in your network-building efforts, and will assist in whatever way we can with further planning for this Consortium.

Sincerely,

Mark Mason
Director

MM/kvs

An Equal Opportunity Employer

Minnesota State Department of Education
Capitol Square ☐ 550 Cedar Street ☐ St. Paul, Minnesota 55101

July 9, 1981

Ms. Molly Redmond, Coordinator
Midwest Energy Education Consortium
5430 Glenwood Avenue
Minneapolis, MN 55422

Dear Molly:

I am writing to confirm my department's commitment to the Midwest Energy Consortium. Clearly, the Consortium has done much to raise the consciousness of the educational leadership in those States where it has been active.

I have read the new proposal and I am excited about the prospect of working with all of you again. Normally this letter would have been commissioned for and signed by our Commissioner of Education. However, as you know we are in the midst of transition and I thought that in the interest of expediency, I would get the letter out as soon as possible under my own signature.

Good luck on the new proposal, Molly. You have done a super job this year and I have every confidence that you will again exceed our expectations should the proposal be refunded. Please call me if I can help in any way.

Sincerely,

Richard C. Clark, Specialist
Science Education
612/296-4071

RCC:tdz

AN EQUAL OPPORTUNITY EMPLOYER

STATE OF OHIO
DEPARTMENT OF EDUCATION
COLUMBUS
43215

FRANKLIN B. WALTER
SUPERINTENDENT OF
PUBLIC INSTRUCTION

G. R. BOWERS
ASSISTANT SUPERINTENDENT
OF PUBLIC INSTRUCTION

July 13, 1981

Molly Redmond, Coordinator
Midwest Energy Education Consortium
5430 Glenwood Avenue
Minneapolis, Minnesota 55422

Dear Mrs. Redmond:

The Ohio Department of Education pledges support for continuation of the Midwest Energy Education Consortium office and operations. Ohio's team has been a very active participant in Consortium energy education activities and desires to continue.

We are now developing a "Teacher Energy Education Program for the Classroom". The help and assistance obtained from other midwest states through the Consortium has been immeasurable.

Careful review of the proposal for continued funding confirms that goals set forth are both attainable and on-target.

If you have questions or need additional, supportive information, please contact Harry R. Meek, Manager, Energy Assistance Office, 614-466-4526.

Your efforts in this endeavor are to be commended.

Sincerely,

G. R. Bowers
Assistant Superintendent
of Public Instruction

GRB:sbd

STATE OF OHIO
DEPARTMENT OF EDUCATION
COLUMBUS
43215

FRANKLIN B. WALTER
SUPERINTENDENT OF
PUBLIC INSTRUCTION

DIVISION OF PERSONNEL
PUBLICATIONS and LEGAL SERVICES
OFFICE OF ENVIRONMENTAL EDUCATION
614-466-5015

July 1, 1981

To Whom It May Concern,

The Midwest Energy Education Consortium has been valuable to the energy education services this office provides to Ohio school districts. Its bulletins, bibliographies and other publications have brought to my attention information I would not have had time to collect on my own. Its quarterly meetings have brought me into contact with other highly skilled and knowledgeable people with energy education responsibilities similar to my own.

Further, the Consortium has encouraged energy educators here in Ohio to cooperate on state efforts and has been responsible for the establishment of an Ohio coordinating group.

All of this progress has occurred in only one year. The Consortium has benefited the other states similarly. I recommend without reservation the continuation of the Midwest Energy Education Consortium for the second year.

Sincerely,

John Hug

John Hug, Director
Office of Environmental Education
Ohio Department of Education

JH/dc

"An Equal Opportunity Employer"

Columbus Southern
COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY
215 N. FRONT ST., COLUMBUS, OHIO 43215

Mary K. Walsh
Coordinator-Educational Services
Information Services

July 2, 1981

Ms, Molly Redmond, Coordinator
Midwest Energy Education Consortium
5430 Glenwood Avenue
Minneapolis, Minnesota 55422

Dear Molly:

Thank you for arranging an informative, productive meeting of the Midwest Energy Education Consortium in Madison, Wisconsin in June. I was especially excited to learn about Indiana's plans for an economics of electricity workshop for teachers. Since the Ohio electric companies and the Ohio Council on Economic Education have similar plans we may be able to share information. On several occasions during the past year I have either called on consortium members from other states or used their materials, thus saving time and effort.

Other beneficial aspects of the consortium have been the activities of the members or representatives within Ohio. My company and our customers will benefit from the joint efforts of the Ohio consortium members in such activities as teacher surveys, new energy curriculum materials, a state-wide energy conference and other forms of in-service training for teachers like the recent DOE workshop held at Bowling Green State University. I might also add that these Ohio projects benefit because of utility assistance in the form of either staff time, financial contributions or a more direct means of contacting large numbers of educators.

If it had not been for the Midwest Energy Education Consortium, I wonder if some of these cooperative efforts would have taken place in Ohio.

Again, thanks Molly for your efforts in energy education.

Sincerely,

Mary K. Walsh

Mary K. Walsh

MKW:aj

cc: Ohio Team Members

We are committed to provide electric service in response to our customers' needs consistent with sound technology and economic conditions.

Bowling Green State University

Office of the Graduate Dean &
Vice Provost for Research
Bowling Green, Ohio 43403
Phone (419) 372-2791
Cable: BGSUOH

August 3, 1981

MEMORANDUM

TO: WHOM IT MAY CONCERN

FROM: Thomas B. Cobb, Assistant Vice Provost for Research TBC

SUBJECT: Support for Midwest Energy Education Consortium

I am pleased to write in support of the Midwest Energy Education Consortium. I first became associated with this Consortium about one year ago, and have been impressed with the extent of activities undertaken and with the fostering of cooperative activities among the member states in the field of energy education.

The Consortium has proved to be a significant means for the coordination of activities in the Midwest region and prevention of duplication and overlap of efforts. I have found it beneficial to use their newsletter to advertise local programs to others and also as a means of finding out about programs in other locations.

The resource bibliographies and library materials collected by the Consortium have proved beneficial in a number of circumstances to obtain information about specific energy education activities in other states. As an example, I recently obtained a scope and sequence chart developed in Minnesota which will be applied to a similar energy education program in Ohio. Conversely, we have supplied information about local community education activities which were undertaken in our state, and I hope these will be shared with others.

Through the Consortium we have learned of conferences and workshops of special project activities that have been able to be transferred to other locales. Accordingly, I view it an especially meaningful way to maintain contact and currency in the field of energy education. I would hope that its activities can continue and would urge support in any means whatsoever for its continuation.

klk

State of Wisconsin \ BOARD OF VOCATIONAL, TECHNICAL & ADULT EDUCATION

ROBERT P. SORENSEN, Ph.D.
State Director
4802 Sheboygan Avenue, 7th Floor
MADISON, WISCONSIN 53702

September 23, 1981

Ms. Molly Redmond, Coordinator
Midwest Energy Education Consortium
2395 University Avenue
St. Paul, MN 55114

Dear Ms. Redmond:

We endorse the continuation of the Midwest Energy Education Consortium. It has been an effective way to stretch state resources by sharing materials and benefitting from the experience of other states which piloted new programs.

The consortium serves as a sounding board for the development of new program ideas and delivery strategies. It also functions to alert our representative to new national initiatives.

Because it brings energy education specialists from all three Wisconsin educational systems (the University, Public Schools, and VTAE) together with the public education specialist from the Wisconsin Division of State Energy, the consortium has served as a focus for inter-system cooperation in Wisconsin.

We are hopeful you will find appropriate funding to continue in operation.

Sincerely,

Robert P. Sorensen

Robert P. Sorensen, Ph.D.
State Director

RPS/SA/hg

cc: Sherman D. Ansell, Ph.D., Energy Consultant

Wisconsin Energy Extension Service
University of Wisconsin—Extension

435 Extension Building, 432 North Lake Street, Madison, Wisconsin 53706 (608) 263-1662

July 8, 1981

Ms. Molly Redmond
Midwest Energy Education Consortium
5430 Glenwood Avenue
Minneapolis, Minnesota 55422

Dear Ms. Redmond:

This letter is written in support of the proposal to continue the activities of the Midwest Energy Education Consortium. The Consortium serves as an essential link between educators and state energy officials in the states of Illinois, Indiana, Ohio, Minnesota and Wisconsin. It is the only formal communications network in existance for this region and may be the only one of its kind in the United States.

The Midwest Energy Education Consortium represents a benchmark of inter-state cooperation and coordination in energy education by serving as means for the sharing of information, expertise and resources. Clearly, this pioneering network should not only be continued but be expanded to include other states and groups.

The continuation and expansion of the Consortium will yield two important products for the benefit of Consortium members. The first is a very real reduction/saving of time and resources in the development of energy education materials. This will be accomplished through the sharing of materials and experience. In other cases it will be through cooperation on educational programs. The second product of the Consortium results from the face-to-face interaction among Consortium members at consortium-sponsored conferences. Conference participation builds a spirit of cooperation and promotes the exchange of ideas and concepts.

Beyond any doubt, the Midwest Energy Education Consortium has contributed to the quality and quantity of energy education materials available to educators in the State of Wisconsin. In this respect, it has proven to be a necessary and important tool in building Wisconsin's energy education program. We look forward to our continued involvement with the Consortium.

Sincerely,

William R. Bernhagen
Director, Wisconsin
Energy Extension Service

WRB:lb

UWEX UW-Extension provides equal opportunities in employment and programming, including Title IX requirements.

Appendix I

Financial Report
DOE Grant #DE-FG02-80IR10905
to
Minnesota Environmental Sciences Foundation, Inc.

	Original Budget	Expenditures through 8/31/81
Coordinator's Salary	$ 18,000	$ 18,000.00
Administrative Assistance	9,000	2,937.29
Social Security & Unemployment	3,360	1,519.57
Fiscal Agent	6,000	6,000.00
Office Supplies/Communications	2,400	2,318.17
Travel	16,740	13,569.64
Lab & Instructional Materials	3,300	746.80
Other Contractual Services	500	419.10
TOTAL:	$ 59,300	$ 45,510.57

	Estimated Budget submitted 7/10/81 for extension of project through 11/30/81	Expenditures through 11/30/81
Coordinator's Salary	$ 4,500	$ 4,500.00
Administrative Assistance	1,500	1,113.00
Social Security & Unemployment	500	380.80
Travel & Per Diem	1,500	955.90
Lab & Instructional Materials	500	277.62
Office Expense/Supplies	2,000	1,504.08
	$ 10,500	$ 8,731.40

Costs for preparation of Final Report:

Coordinator's Salary	$ 1,125.00
Administrative Assistance	266.00
Social Security & Unemployment	103.75
Printing costs	670.60
Mailing costs/Telephone	239.97
TOTAL: Preparation of Final Report -	$ 2,405.32

The U.S. Department of Energy Grant #DE-FG02-80IR10905 for $50,000 was awarded to Minnesota Environmental Sciences Foundation, Inc. MESFI did not receive the award in a direct grant but, rather, billed the D.O.E. on an incurred cost basis. State funds were paid directly to MESFI.

The Executive Committee has endorsed the Coordinator's use of the remaining state funds to seek funding to continue the Consortium.

Of the $50,000.00 grant from the U.S. DOE, $50,000.00 was expended.